that the hemorrhage arose from the slipping of a ligature.

The "slipping of a ligature" around the appendix as late as the sixth day could hardly be expected to be followed by such a hemorrhage and besides is not explanatory of the hemorrhage from the stomach. Kelly also cites a case in which hemorrhage from the bowels began four days before the patient was operated on and continued until the fifth day after.

CONCLUSIONS.

1. Hemorrhage from the bowel following appendectomy has occurred in a number of cases with various methods of treating the stump.

2. The purse-string suture is the most popular method and is most frequently employed. The greater proportion of cases of hemorrhage with the purse-string suture may be partly explained by the predominance of its employment over other methods.

3. Every case of hemorrhage from the bowel following appendectomy can not be explained by bleeding from the stump. Some of the cases may be explained by assuming a condition to be present similar to that producing hematemesis after abdominal operations.

A REPORT OF TWO CASES OF MYXEDEMA.

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In view of the fact that the diagnosis of this disease in these patients had been overlooked for some time, and they thus deprived of early treatment, it might be of interest if the following were reported:

CASE 1.—*History.*—Mrs. E. O., aged 40, a resident of Galena, Ill., occupation housewife, height 5 feet 3 inches. There was nothing of importance in the family history; as a child and young woman she enjoyed good health, average weight 115 pounds. Married at age of 20; had no children and no abortions. She was healthy until the beginning of her present condition, which she noticed about the age of 33, when she began to increase in weight and to have severe headaches. She also suffered at times from indigestion and constipation. Continued to increase in weight for about two years, when she reached 187 pounds, and, to use her own expression, "had lost all resemblance to her former self." When I first saw her, February, 1904, she complained of headache, shortness of breath, amenorrhea, loss of memory, lack of interest in her work and surroundings. Her speech was slow and deliberate. Her replies to questions were slow, and, although an intelligent woman, it took her some time to put her ideas into words. She seldom perspired, said she was nearly frozen all the time during cold weather and enjoyed sitting in the sun during the hottest days of summer.

Examination.—Expression dull and apethetic, face large and round, eyelids heavy, lips and tongue thick, hair thin, dry and harsh, nails brittle and easily broken, teeth poor. General infiltration of the skin and masses of tissue beneath the chin and in the supraclavicular regions. The skin was dry and stretched and very adherent to the underlying tissue. It could not be pushed into wrinkles or folds and did not pit on pressure. Heart, lungs and genitourinary organs normal. Chemical and microscopic examination of the urine showed nothing abnormal.

Blood Examination: Hemoglobin, 80 per cent.; red cells, 3,800,000; white cells, 9,700. Differential blood count showed nothing abnormal.

Diagnosis.—Myxedema.

Treatment.—The patient was given thyroid tablets, beginning with one-half of a 5-gr. tablet twice daily and gradually increasing until at the end of one week she was taking one 5-gr. tablet three times daily. Under this treatment her headaches disappeared, her breathing became better, the bowels regular, and there was marked loss in weight. After two months' treatment she weighed 154 pounds and said she was feeling well. At this time, April 5, 1904, she went on a visit from the state and was lost sight of. Being advised that she should continue the treatment indefinitely in smaller doses, she replied that she did not want to lose too much flesh or she would have to make over all her clothes.

CASE 2.—*History.*—Mrs. A. C., aged 37, resident of Illinois. Grandmother on father's side had "paralysis," also a brother and sister of father. Otherwise family history negative. Personal history: Healthy during childhood and as a young woman; married at 19. Had two children, aged 17 and 11, respectively. Average weight, 120 pounds. About eight years previous to the time I was consulted she had an epileptic attack and was confined to her bed for one week. Several months after she had two more such attacks, but was not confined to bed with them. She complained of headaches, weakness and constipation. She was up and about her work almost all the time for three years, but was very irritable and nervous. In 1902 she began to lose the use of the right side and was unable to walk, complained of severe headache, nausea and vomiting after headache began. After about four months she regained the use of the right side and was able to walk and do some housework. In 1903 she noticed she was increasing in flesh, which continued until she weighed 157 pounds. The face became broad and plump, the lips slightly thickened, hair became coarse, dry and began to fall out. Teeth rapidly decayed, amenorrhea developed, headaches increased in frequency and severity, slowness of speech became noticeable, and she lost interest in her household affairs.

Examination.—When first seen, Jan. 5, 1905, the expression was dull and apathetic, the face broad and full, the cheeks slightly reddened, eyelids puffy, the neck thick and plump. In the supraclavicular regions there were rolls of tissue and general skin infiltration which did not pit on pressure. The skin was firmly attached to the underlying tissue and could be wrinkled with difficulty. The gait was slow and labored as though there were an inhibition of motor impulses. Her answers to questions were well formed, but came slowly, and one had the impression that he should repeat the question lest she failed to grasp it. The reflexes were normal. The pupils slightly dilated, but responded readily to light. Ophthalmoscopic examination showed the media clear and the fundus normal. The heart, lungs and genitourinary organs showed no abnormality. Temperature, 98 F. Urine negative.

Blood Examination: Hemoglobin, 85 per cent.; red cells, 4,100,000; white cells, 8,900. Differential blood count showed nothing abnormal.

Diagnosis—Myxedema.

Treatment.—She was given one-half of a 5-grain thyroid tablet twice daily. This was increased, and by the end of the first week she was taking one tablet three times daily. Her condition rapidly improved. Her headaches became less severe and less frequent, and by the end of three weeks she had made decided improvement. One month after beginning treatment she unduly exposed herself and pneumonia developed, from which she died on the third day.

I felt some timidity about asking permission to examine the thyroid postmortem, and failed to do so. Later in conversation with the husband I stated that I wished an examination had been made, and he said he would have been glad to have had it done. I thus missed the opportunity of confirming my diagnosis by pathologic finding.

In regard to the prognosis of this disease I wish to quote from von Mering[1] as follows:

It is chronically progressive, duration extending over many years, however, death rarely occurs from the disease itself, but from some intercurrent affection. Under the thyroid treatment the prognosis is good, but the treatment should be carried out in two stages. The patient should first receive sufficient of the desiccated gland or the glycerin extract to establish normal metabolism. This will vary with the individual both as to dosage and time required. In reports that I have been able to collect the time varied from six weeks to six

1. Lehrbuch der Innerin Medizin, p. 939.

months, and is said to have little effect in restoring the function of the thyroid gland. It is therefore necessary after normal metabolism has been established to continue the treatment indefinitely, but smaller doses are required in this second stage, and can only be determined by the condition of the patient.

A METHOD OF LIGATING THE APPENDIX WITHIN THE CECUM.

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The following method of ligating the appendix is submitted because of the many recent reports of hemorrhage following this operation. The method consists in setting a snare within the cavity of the cecum to catch the appendix when the latter is inverted. This snare may be set with an ordinary straight needle by using the blunt end as a point, but it is not the proper instrument for this purpose. To do it effectively, and with the least danger to the patient and injury to the tissues, requires a special needle (Fig. 1) with an eye at its point.

It is assumed that the appendix is delivered without the abdominal cavity and that the mesoappendix has been ligated. Furthermore, that the circumference of the cecum is divided into thirds. The method is applicable in all ordinary cases of appendicitis, but not in those cases where the appendix can not or should not be inverted.

The corrugated-like depressions in the serosa, due to the tying of the appendix, and the points of puncture may be treated by Lembert sutures or enclosed in a purse-string suture at the discretion of the operator. The illustrations (Figs. 1 to 8) with their legends fully

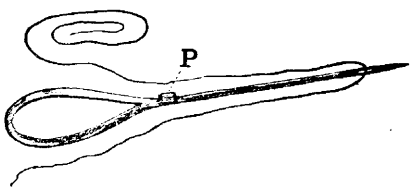

Figure 1.

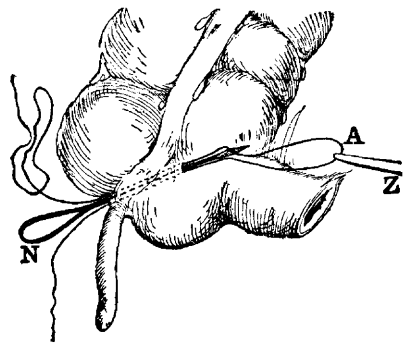

Figure 2.

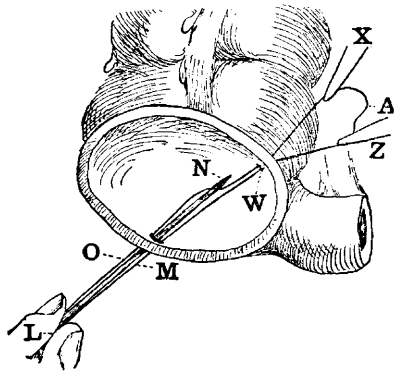

Figure 3.

Fig. 1.—Author's straight needle with the eye at its point. P, projection on the needle which serves to indicate the position of the needle in making the loops, A and E, in Figures 2, 3 and 4.

Fig. 2.—Illustrates the insertion of the needle, N, carrying a silk or linen thread into the cavity of the cecum at the base of the appendix and near the mesoappendix border, and out at a point representing the first third of the circumference of the cecum and about one half inch below the base of the appendix, Z, a pair of forceps grasping the lagging end of the suture forming the first loop, A. (Always grasp the *lagging* end of the thread, i. e., the end opposite the direction in which the needle is traveling. To grasp the leading end is to invite defeat).

Fig. 3.—Cavity of the cecum, its blind end having been cut away. The needle point is withdrawn into the cecal cavity *only*. Immediately on passing the needle through the cecal wall at W, the suture should be pulled through to make a large loop, A. The lagging end, M, and the leading end, O, of the suture, together with the needle should then be grasped by the operator at L, and the loop A, by forceps Z and X. Sufficient traction should then be made at Z and X, to make the lagging and leading ends of the suture taut between L and these points so as to facilitate the withdrawal of the needle through the wall, W, into the cecum. The forcep, X, should be released as soon as the needle point is within the cavity. Loop, A, is made extra large primarily because it is much easier to pull part of loop, A, back into the cavity in forming loop, E (Fig. 4), than it is to slip the needle on the thread within the cavity.

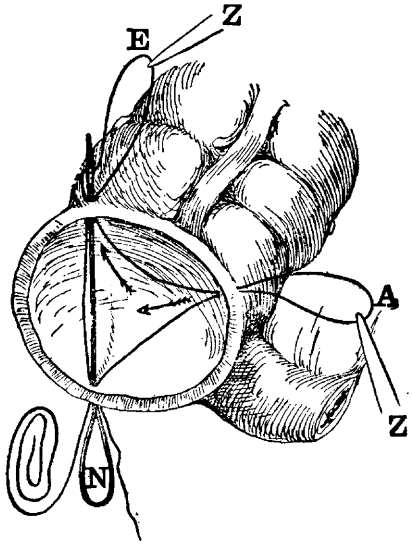

Figure 4.

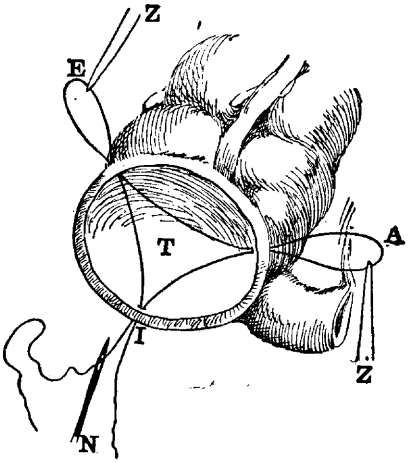

Figure 5.

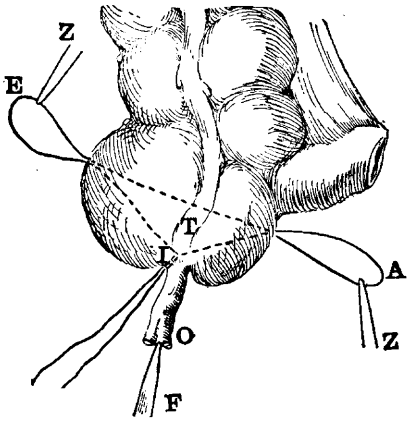

Figure 6.

Fig. 4.—The arrows show the direction the needle travels in forming loop E.

Fig. 5.—The needle, N, is withdrawn. This leaves three punctures in the cecal wall, each containing a double thread, A, E, and I, of the suture so arranged as to form a triangle, T, within the cavity of the cecum.

Fig. 6.—The blind end of the cecum has been restored. The appendix, O, crushed and cut off about three-fourths or one inch from its base, carbolized, alcoholized and grasped with a pair of tissue forceps, F, and is ready to be inverted and carried into the cavity of the cecum and through the triangular snare. T, formed within the cecum, shown by the dotted lines from the three points, A. E, and I.